

NAVAL AIR ENGINEERING CENTER
PHIA: PHIA, PENNSYLVANIA 19112
AERONAUTICAL MATERIALS LABORATORY
MATERIALS APPLICATION AND ENGINEERING DIVISION

DATE 15 December 1966

REPORT NO. NAEC AML 2552

ORDTASK ORD 934-010/200-5/17250000
Assignment 65-55

Revision of NAVORD OD 3000
Lubrication of Ordnance Equipment



A. Object

To provide the technical information necessary for revising Ordnance Document NAVORD OD 3000 (Lubrication of Ordnance Equipment) for the purpose of providing naval operating forces with the latest information on lubricants, hydraulic fluids and preservative materials.

B. Details

NAVORD OD 3000 was examined in its entirety to determine the proper deletions, additions and revisions required to update the document technically. Comments and recommendations prepared by members of the American Ordnance Association were reviewed and utilized in preparing a first draft of changes proposed for inclusion in the revised document. The following is a summary of the proposed changes which have been completed.

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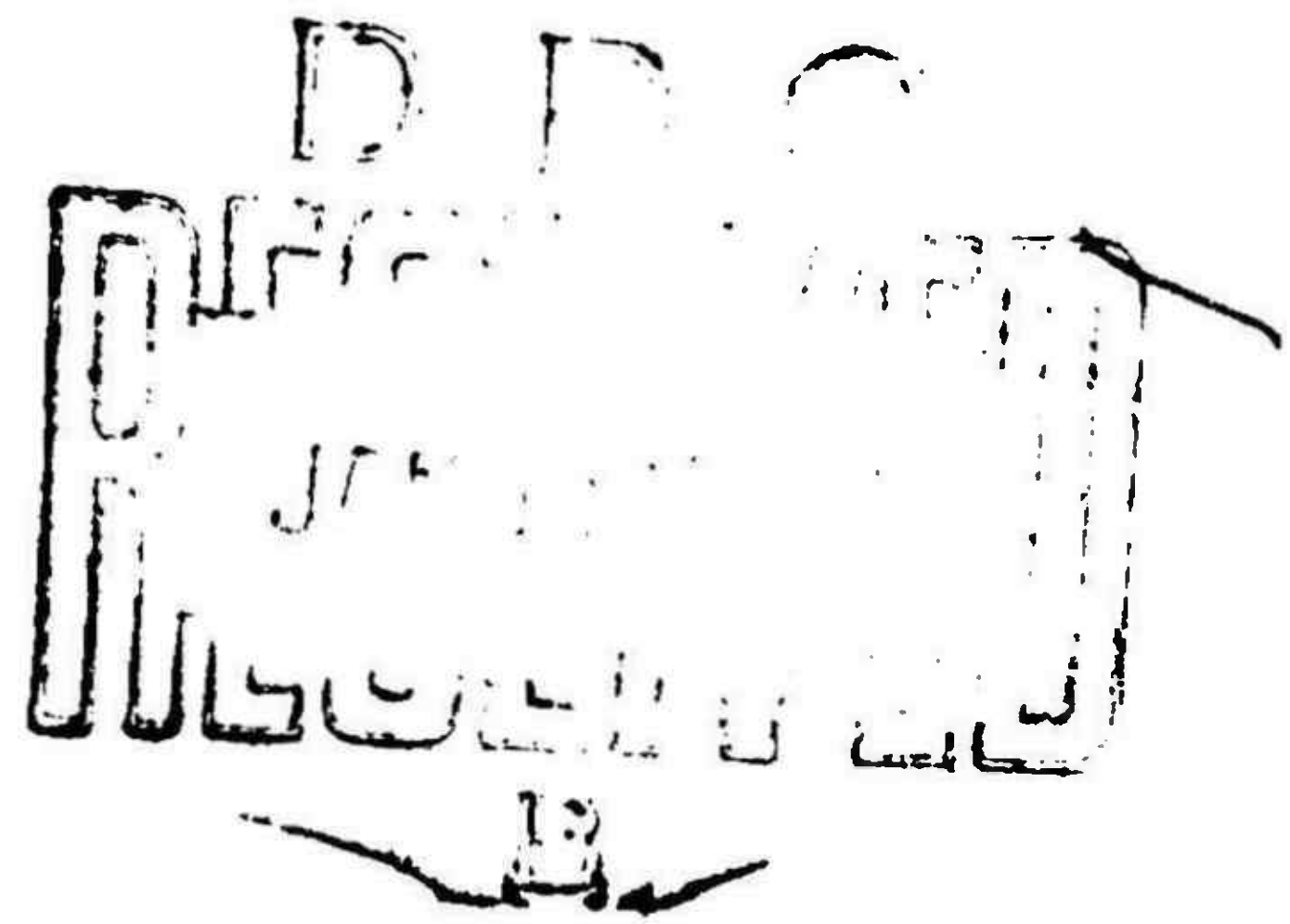
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1. The introduction was revised to reflect changes in scope and to reference additional documents required by those changes.

2. A list of current specifications and stock numbers considered pertinent for inclusion in the revised OD 3000 was prepared and is given by Appendix A. The list includes multipurpose lubricants and bonded dry film lubricants. Tables and charts covering the characteristics and uses of the specified lubricants and related products were expanded to include the additional items.

3. Technical contents of the following chapters were updated: Lubrication and Corrosion Prevention, Fluids for Hydraulic Systems, Coolants and Antifreeze Compounds, Operations Under Extreme Climatic Conditions, and Storage of Lubricants and Related Materials.

4. The glossary was expanded to include lubrication terms resulting from advanced technology, and outdated pictorial illustrations have been replaced by those currently in use.

5. A list of military and NATO symbols appearing on lubrication charts has been added to this document in order to facilitate the identification of lubrication products procured under specifications of other NATO countries.

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C. Conclusions

It is concluded that the work prepared under this assignment will provide the Engineering Standardization Office (WESO) with technical information necessary for the preparation of a draft revision that will provide guidance for naval operating forces in the selection, and application of current lubricants, hydraulic fluids and related products used in the maintenance of naval weapons systems.

D. Action

The assembled draft revision will be circulated to Naval Air Stations, the American Ordnance Association and other interested parties. Additional work generated by comments received will be conducted under a new assignment to be established by the Naval Ordnance Systems Command.

Prepared by:

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Approved by:

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Appendix A - Specifications Included in the Revision of OD 3000

SPECIFICATIONS INCLUDED IN THE REVISION OF OD 3000Lubricating Oils

JJJ-C-86
 VV-I-530
 VV-L-751
 VV-L-800
 MIL-L-2105
 MIL-L-3150
 MIL-L-3503
 MIL-L-3572
 MIL-L-3918
 MIL-O-6081
 MIL-L-6082
 MIL-L-6085
 MIL-L-6086
 MIL-L-07808
 MIL-L-7870
 MIL-L-9000
 MIL-L-10324
 MIL-L-11734
 MIL-L-15016
 MIL-L-15018

Solid Film Lubricants

MIL-L-8937
 MIL-L-23398
 MIL-L-81329

Antiseize Compounds

TT-A-580
 MIL-A-907
 MIL-T-5542
 MIL-T-5544
 MIL-T-22361
 MIL-T-27730

Damping Fluids

MIL-F-16929
 VV-P-1078

Coolants & Antifreeze Compounds

O-A-548
 O-E-760
 MIL-A-6091
 MIL-A-8243
 MIL-C-11755

Lubricating Oils

MIL-L-16785
 MIL-L-16958
 MIL-G-17745
 MIL-L-18486
 MIL-L-19224
 MIL-L-22803
 MIL-L-22851
 MIL-L-23699
 MIL-L-25681
 MIL-G-26548
 MIL-I-27694

Lubricating Greases

MIL-G-3545
 MIL-G-4343
 MIL-G-6032
 MIL-G-7711
 MIL-G-10924
 MIL-L-15719
 MIL-L-18458
 MIL-G-18709
 MIL-L-19701
 MIL-G-21164
 MIL-G-23549
 MIL-G-23827
 MIL-G-25013
 MIL-G-25537
 MIL-G-25760
 MIL-G-27549
 MIL-G-27617
 MIL-G-38220
 MIL-G-38277
 MIL-G-81322

Hydraulic Fluids

MIL-H-5606
 MIL-H-13866
 MIL-F-1711
 MIL-L-17672
 MIL-H-81019
 MIL-S-81087
 MIL-H-22072

Specialty Compounds

MIL-G-6711
 MIL-M-7866
 MIL-S-8660
 MIL-C-21567
 MIL-G-26548

Security Classification

DOCUMENT CONTROL DATA - R&D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

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13. ABSTRACT Technical information covering the latest lubricants, their stock numbers, characteristics, uses and methods used in the lubrication of Ordnance equipment was prepared.			

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